

Remarks

Claims 1, 10, and 26 have been amended. Claims 27 to 32 have been added. Claims 1 to 10 and 26 to 32 are pending and under consideration. Claims 11 to 25 are also pending, but have been withdrawn from consideration.

Claim 1 was amended to add the term "target-specific" to make the terminology consistent within the claim. That term also appears at line 2 of claim 1. Support for the amendment to claim 1 is also found in the specification, e.g., at page 5, paragraph 10, and at page 8, paragraph 27. Support for the amendment to claim 10 is found in the specification, e.g., at page 17, paragraph 53. Support for the amendment to claim 26 is found in the specification, e.g., at page 5, paragraph 10, and at page 8, paragraph 27. Support for new claim 27 is found in the specification, e.g., at original claims 1 and 26, at page 5, paragraph 10, and at page 8, paragraph 27. Support for new claims 28 and 29 is found in the specification, e.g., at page 3, paragraph 4; at page 9, paragraph 30, where U.S. Patent No. 6,045,996 ("the '996 patent") is listed; and at page 6, paragraph 20, where the '996 patent is incorporated by reference. Support for new claims 28 and 29 is found in the '996 patent, e.g., at Col. 6, lines 12 to 26. Support for new claim 30 is found in the specification, e.g., at original claim 26 and at page 17, paragraph 53. Support for new claims 31 and 32 is found in the specification, e.g., at original claims 1 and 26, at page 3, paragraph 4; at page 9, paragraph 30 where the '996 patent is listed, and at page 6, paragraph 20, where the '996 patent is incorporated by reference. Support for new claims 31 and 32 is found in the '996 patent, e.g., at Col. 6, lines 12 to 26.

Thus the claims are fully supported by the specification and add no new matter.

FINNEGAN
HENDERSON
FARABOW
GARRETT &
DUNNER LLP

1300 I Street, NW
Washington, DC 20005
202.408.4000
Fax 202.408.4400
www.finnegan.com

Rejection in View of Brink

The Examiner rejected claims 1 to 10 and 26 under 35 U.S.C. § 102 as allegedly being anticipated by U.S. Patent No. 5,563,034 ("Brink"). See Action, page 2.

Applicants respectfully traverse.

Claims 1 to 9

The Examiner alleges that Brink teaches a method comprising "exposing a substrate containing a first feature comprising an experimental target-specific probe and a control-specific probe to a labeled control target." See Action, page 3. The Examiner cites claim 1 and Col. 9, lines 15 to 32, of Brink for this aspect of claim 1. See Action, page 3.

The cited portions of Brink, however, do not discuss "exposing a substrate containing a first feature comprising an experimental target-specific probe and a control-specific probe to a labeled control target." Claim 1 of Brink discusses "contacting an aliquot of the sample with an oligo-nucleotide probe" and "contacting an equivalent aliquot of the sample with a labeled nucleic acid negative control probe." See Brink, claim 1. Thus, claim 1 of Brink discusses parallel assays. It does not discuss "exposing a substrate containing a first feature comprising an experimental target-specific probe and a control-specific probe to a labeled control target." The other portion of Brink cited by the Examiner, Col. 9, lines 15 to 32, discusses fixing targets to nitrocellulose and probing them with DNA probes. However, it does not discuss a control-specific probe. Thus, Brink does not teach "exposing a substrate containing a first feature comprising an experimental target-specific probe and a control-specific probe to a labeled control target."

Furthermore, even if the Examiner combines the two cited sections, Brink still fails to teach “exposing a substrate containing a first feature comprising an experimental target-specific probe and a control-specific probe to a labeled control target.” Specifically, Brink teaches separate but parallel assays. One assay uses target-specific probe. The parallel assay uses negative control probe. In fact, Brink states that the function of the reverse polarity oligonucleotides “is to serve as negative control probes *in parallel assays with the target-specific probe*, to discriminate true positives from background signal.” See Brink, Col. 8, lines 1 to 3 (emphases added).

Thus, where Brink discusses the use of targets attached to nitrocellulose, the targets for the negative control probe and the targets for the target-specific probe are attached to different areas. Furthermore, the Examiner has failed to point to any of the rest of the disclosure of Brink that would suggest negative control probe and target-specific probe operating in the same assay. In fact, Brink does not discuss how to distinguish the signal of the negative control probes from the signal of the target-specific probes. Thus, the Examiner failed to establish that Brink discloses “exposing a substrate containing a first feature comprising an experimental target-specific probe and a control-specific probe to a labeled control target.”

For at least this reason, the Examiner has failed to establish that Brink anticipates claim 1. Claims 2 to 9 depend from claim 1. Thus, for the reasons described above for claim 1, the Examiner fails to establish that Brink anticipates claims 2 to 9. Because the Examiner fails to establish that Brink anticipates claims 1 to 9 for at least the reasons discussed above, applicants need not address the Examiner’s contentions concerning other elements of those claims. By not addressing those contentions, applicants in no way acquiesce to those contentions.

Applicants respectfully request reconsideration and withdrawal of the § 102 rejection over Brink.

Claim 10

The Examiner rejected claim 10 as allegedly being anticipated by Brink. See Action, page 2. Applicants have amended claim 10 to further recite exposing a substrate to “a labeled experimental target” and to recite “wherein the labeled control target competes with the labeled experimental target for binding to the experimental target probe.” Because the Examiner has not yet had the opportunity to address the new elements of claim 10, the Examiner’s rejection of original claim 10 fails to show all of the elements of amended claim 10. Furthermore, applicants assert that Brink does not teach all of the elements of amended claim 10.

Applicants respectfully request reconsideration and withdrawal of the § 102 rejection over Brink.

Claim 26

The Examiner alleges that Brink teaches a method comprising “contacting the array with: (1) a sample that includes experimental target sequences that are labeled with a first label; and (2) synthetic control target sequences that are labeled with a second label.” See Action, page 5. The Examiner appears to address those aspects of claim 26 by citing Brink’s discussion of the isolation and identification of sulfate reducing bacteria at Col. 12, line 40, to Col. 13, line 45. See Action, page 5. That citation, however, discloses nothing concerning “contacting [an] array with: (1) a sample that includes experimental target sequences that are labeled with a first label; and (2)

synthetic control target sequences that are labeled with a second label.” In fact, the cited portion of Brink does not even discuss the use of a label.

The Examiner cites Brink Col. 15, lines 28 to 45, with reference to “determining the intensity of any signal from the first and second labels in the first and second features.” See Action, page 5. This portion of Brink discusses using a radioactively labeled probe to detect bacteria in solution. However, the cited section only discusses a single label. Thus, this cited section also does not describe “contacting [an] array with: (1) a sample that includes experimental target sequences that are labeled with a first label; and (2) synthetic control target sequences that are labeled with a second label.”

For at least this reason, the Examiner has failed to establish that Brink anticipates claim 26. Thus, applicants need not address the Examiner’s contentions concerning the other elements of that claim. By not addressing those contentions, applicants in no way acquiesce to those contentions.

Conclusion

Applicants respectfully request reconsideration and withdrawal of the § 102 rejection over Brink. Applicants also assert that Brink neither shows nor suggests any of new claims 27 to 32.

Applicants respectfully assert that the application is in condition for allowance and request issuance of a Notice of Allowance. If the Examiner does not consider the application to be in condition for allowance, applicants request that he call the undersigned at (650) 849-6620 to set up an interview.

FINNEGAN
HENDERSON
FARABOW
GARRETT &
DUNNER LLP

1300 I Street, NW
Washington, DC 20005
202.408.4000
Fax 202.408.4400
www.finnegan.com

Please grant any extensions of time required to enter this response and charge any additional required fees to our Deposit Account No. 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW,
GARRETT & DUNNER, L.L.P.

Danielle Pasqualone

Dated: November 20, 2003

By: *REG No. 43,847 for*
M. Paul Barker
Reg. No. 32,013

FINNEGAN
HENDERSON
FARABOW
GARRETT &
DUNNER LLP

1300 I Street, NW
Washington, DC 20005
202.408.4000
Fax 202.408.4400
www.finnegan.com